

## Abstract

According to the present invention, there are provided microorganisms having an ability to producing  
5 xylitol or D-xylulose by fermentation, and a method for producing xylitol or D-xylulose using the microorganisms. Osmophilic microorganisms were collected from soil, and the obtained microorganisms were searched for a  
bacterium having an ability to produce xylitol or D-  
10 xylulose from glucose. Xylitol or D-xylulose is produced by culturing an isolated bacterium in a suitable medium to accumulate xylitol or D-xylulose in the medium, and collecting xylitol or D-xylulose from the medium.